# Dr Lourdes Fernandez Midwife-Led Unit (MLU)







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# FH Midwife-Led Unit (MLU) Philosophy

#### Midwife-Led Unit

The global strategic directions for strengthening nursing and midwifery in 2016-2020¹ stressed that midwives provide 87 percent of the essential care for women and newborn when educated and regulated to international standards, as well as being the most cost-effective healthcare providers for childbearing women. The Global Strategy for Women's, Children's, and Adolescents' Health², launched in 2015, set ambitious objectives to enhance women's health in line with the Sustainable Development Goals (SDGs).

#### These were grouped within three themes:

- 1. Survive (end preventable deaths)
- 2. Thrive (promote health and well-being)
- 3. Transform (expand enabling environments)

Midwives are a crucial resource for achieving these objectives.

In February 2018, the World Health Organisation published guidance on the need for more holistic maternity care.<sup>3</sup> They asserted that in addition to delivering clinically effective maternity care, 'more needs to be done to make women feel safe and comfortable about the experience of labour and childbirth'.<sup>3</sup> The report found that the medicalisation of childbirth, a phrase used to describe the regular use of medical interventions to initiate, accelerate, regulate, and monitor pregnancy, may have undermined women's confidence and capability to give birth, and potentially diminished 'what should be a positive, life-changing experience'. They recommended a need to focus on providing respectful care, emotional support,

continuity of relationships with carers, encouragement of mobility, and other measures to address this problem.<sup>3</sup> The White Ribbon Alliance (WRA) statement on respectful maternity care, which sets out the universal rights of childbearing women, also emphasises the importance of respectful care and women's autonomy.<sup>4</sup> Many of these approaches and principles are central to the values of midwifery care.

Definition of a Midwifery Unit (MU): The MU offers maternity care to healthy women with straightforward pregnancies in which midwives take primary professional responsibility for care (Rowe, et al., 2012).

Alongside Midwifery Unit (AMU) – during labour and birth, medical diagnostic and treatment services, including obstetric, neonatal, and anaesthetic care, are available to women in a different parts of the same building, or in a separate building on the same site.

This may include access to interventions that can be carried out by midwives, for example, electronic foetal heart monitoring. To access such services, women need to transfer to the Obstetric Unit, which will generally be by trolley, bed, or wheelchair.<sup>5,6</sup> Researchers have demonstrated how midwifery units adopt and promote a biopsycho-social model of care that addresses physical, psychological, and social needs, also referred to as a social model of care.<sup>7</sup> The model promotes equality between women and their carers, bodily autonomy, and informed decision-making.<sup>8-11</sup> Services are organised around the social needs of women and families, so aim to provide a comfortable, homely atmosphere, rather than a clinical environment, which can seem impersonal, cold, and frightening.

The Fernandez Hospital Midwifery Unit aims to enhance women's satisfaction with the experience of labour, birth, and emotional well-being and facilitate the transition to parenthood. By working in partnership with midwives, women should feel empowered to make their own birth decisions, with the aim of promoting normal birth and decreasing intervention.

Midwifery care is based on the understanding that childbearing is a healthy progression through the life cycle. Midwives uphold pregnancy and childbirth as a state of health, a normal physiological process and a profound event in a woman's life. Midwives see birth as a normal physiological process that should be centred around the mother, family, and their needs. Midwives can give the necessary support, care, and advice during pregnancy, labour, and postpartum.

#### A midwife can:

- Support births on the midwife's own responsibility
- · Provide care for the newborn and the infant
- Provide preventive measures, such as health and well-being guidance
- Promote normal birth
- · Detect complications in mother and child
- Refer plus assess access to medical care or other appropriate assistance
- · Carry out emergency measures

A healthy mother with a positive birth experience, a healthy baby, and family integrity must be the focus of high-quality maternity services. High-quality care should be safe, effective, womancentered, timely, and equitable. It should also be evidence-based and delivered as close as possible to the communities where women live or work.

High-quality care encompasses midwife-led care for normal pregnancy, birth, and the postnatal period. All women need midwifery care at every stage. The midwife helps empower women to make decisions based on their clinical needs, values and preferences, the research evidence, and the context of care. In both, short and the long-term pregnancy, the early years have a decisive impact on the health and well-being of mothers, children, and families. Thus, the midwife has a vital role to play in helping to ensure the health of mother and baby and in their future health, well-being, and that of society as a whole.

# Midwifery Philosophy of Care

- We believe that the well-being of women and their families comes first. Our philosophy of care is grounded in the belief that each woman's labour and birth is unique, memorable, and celebratory, and that most women can give birth without the need for medical technology. By creating a calm atmosphere and building trusting relationships with women and their birth partners, we feel we will optimise conditions for natural childbirth.
- We are committed to maintaining the highest possible standards of care, based on recommended best practices, the expertise of a Midwife, and current evidence-based research.
- At Fernandez Hospital, we want the women we care for to be treated with kindness and respect, which will enable them to feel safe, supported, confident, and totally involved in all aspects of their care, thus empowering women to make informed choices about their birth which will promote a positive experience.

#### Normal Birth Guidelines for the Midwife-Led Unit

These guidelines are intended as a guide and provided for information purposes only. The information has been prepared using a multidisciplinary approach with reference to the best information and evidence available during preparation. The guidelines are not a substitute for clinical judgement, knowledge, expertise, or medical advice. Variation from the guidelines, considering individual circumstances, may be appropriate.

These guidelines do not address all elements of standard practice and accept that individual clinicians are responsible for the following:

- Providing care within the context of locally available resources, expertise, and scope of practice
- Supporting client rights and informed decision-making, including the right to decline intervention or ongoing management
- Advising clients of their choices in a culturally appropriate environment that enables comfortable and confidential discussion. This includes the use of interpreter services where necessary
- · Ensuring informed consent is obtained before delivering care
- Meeting all legislative requirements and professional standards
- Applying standard precautions, and additional precautions as necessary, when delivering care
- Documenting all care in accordance with mandatory and local requirements

#### 1. Introduction

Birth is a normal physiological process that most women, will progress without incident. These guidelines guide midwives in the intrapartum care of low-risk healthy women. This guidance is suitable for all those women who are generally in good health following a straightforward pregnancy and are eligible for MLU care

(Refer to FH MLU Admission Criteria).

The factors that will encourage the rhythm and flow of normal labour include:

- · A birthing environment that is conducive to hormonal release
- · Continuous midwifery support by a known midwife
- · Freedom of movement
- · Comforting massage
- Use of warm water
- · Visualisation and relaxation techniques
- A peaceful, unhurried atmosphere, together with support from loving companions
- Unrestricted access to food and fluids

The guiding principles of these practice points are evidence-based, promoting best practice for midwife-led care, which is womencentred, holistic, and accepts that every childbirth experience is unique to that woman, her birth partner, and her family.

#### 1.1 Defining normal birth

The terms 'physiological birth', 'normal birth', and 'natural birth' are often used interchangeably but usually refer to birth that has not been managed by medical intervention.<sup>9-11</sup> Normal birth includes the opportunity for uninterrupted skin-to-skin and breastfeeding in the first hour after birth.<sup>7</sup>

#### The World Health Organization defines normal birth as:12

- · Spontaneous onset
- Low-risk at the start of labour
- · Remains low-risk throughout labour and birth
- · The baby is born:
  - Spontaneously
  - In the vertex position
  - Between 37 and 42 completed weeks gestation (term)
- · The woman and her baby are in good condition after the birth

Other professional organisations have included broader criteria than generally recognised as physiological or normal.<sup>67</sup>

#### In defining normal birth, two factors are taken into consideration<sup>12</sup>:

- · The risk status of the pregnancy and
- · The course of labour and birth

#### 1.2 Indications for consultation or referral

Discuss, consult, refer, and manage as indicated according to Fernandez Hospital MLU transfer policy

# 2. Supporting normal birth

This guideline recognises pregnancy and birth as a normal physiological process<sup>1</sup> occurring within a wellness paradigm<sup>2</sup> which is supported by:

- · A shared positive birth philosophy of care<sup>8,17,18</sup>
- A clear understanding of the hormonal physiology during labour and birth<sup>19</sup>
- Clear communication<sup>20</sup> and professional collaboration<sup>1,14,15,20,21</sup>
- · Continuity of care<sup>2,22</sup> and carer<sup>23</sup>
- One-to-one midwifery care<sup>13,24-27</sup>
- Optimising the birth environment<sup>28-30</sup>
- Ongoing birth preparation during pregnancy<sup>24,31,32</sup>
- Maintaining the minimum level of birth intervention<sup>3,4</sup> compatible with safety
- Food and fluid intake<sup>33</sup>
- Freedom of movement and position<sup>27</sup>
- Keeping mothers and babies together after birth with support for breastfeeding<sup>34</sup>

- · Asking two key questions:
  - Is the care woman-centred?
  - Is the care safe?

#### 2.1 Hormonal physiology

The benefits of normal labour and birth for the woman and her baby include<sup>19</sup> after the:

- Enhances labour effectiveness
- · Promotes foetal readiness for birth
- Protects the baby from reduced oxygen during labour
- · Improves physiological response to labour stress and pain
- · Promotes maternal and newborn transitions
- · Helps to minimise maternal bleeding after birth
- · Optimises breastfeeding
- · Promotes optimal mother-infant attachment

The perinatal period represents a highly sensitive time for the woman and her baby in relation to hormonal and other biological processes. <sup>19</sup> Supportive care is aimed at minimising maternal stress and anxiety due to the negative impact of stress hormones on the labour and birth process. <sup>19,35</sup>

#### 2.2 Woman-centred care

Woman-centred care includes respect and dignity, by supporting the woman to be central and active in her own care through: 15,36

- Holistic caretaking account of the woman's physical, psychosocial, cultural, emotional, and spiritual needs.<sup>1,15</sup>
- Focusing on the woman's expectations, aspirations, and needs, rather than the institutional or professional needs.<sup>36</sup>
- Recognising the woman's right to self-determination through choice, control, and continuity of care from a known caregiver.
- Acknowledging a woman's right to privacy and making informed, autonomous health care decisions.<sup>37,38</sup> Respect the woman's right to decline recommended care<sup>1,16,24</sup> and provide a supportive pathway for women declining recommended care.
- Recognising the needs of the baby, the woman's family, and significant others<sup>39</sup> while acknowledging that the woman remains the decision-maker in her care.
- Providing emotional and physical support to the woman and using supportive language build confidence in the woman.

#### 2.3 Birth environment to

Aim to create an environment in which the women feel private, safe, and undisturbed<sup>19,28,40</sup> and that supports her to maintain a sense of control of her experience. Considerations include respecting the woman's choice of birth environment and maintaining<sup>41</sup> the following:

- · A sense of calm
- · Protecting the woman's privacy
- · Providing support and comfort
- A home-like setting<sup>30</sup> that may include:
  - Free use of adjustable lighting and temperature to achieve a calming ambience<sup>35</sup>
  - Discreet positioning medical equipment by practitioners
  - Use of furniture to support upright positions<sup>35</sup>
  - Easy access to shower and water immersion35

# 3. Initial assessment in MLU/Triage

See Flow Chart (Appendix 1)

When a woman presents in labour who has requested MLU care antenatally or is midwife-led (See Midwife Sticker on notes Appendix 4), they can be assessed by a midwife in the MLU. This is subject to activity, so triage attendants are requested to liaise with the midwifery staff in MLU. The triage and admission form should be as per FH current policy. Midwife to ensure mother fits MLU criteria and is suitable for midwife-led care.

If a mother is suitable for MLU but has not previously been counselled, it is the responsibility of triage staff to inform them of all their birthing options, present the MLU leaflet and act in accordance with the mother's wishes.

When performing an initial assessment of a woman in labour, listen to her story and consider her preferences and emotional and psychological needs.<sup>42</sup>

Carry out an initial assessment to determine if midwife-led care in any setting is suitable for the woman, irrespective of any previous plan. The assessment should comprise the following:

#### Observations of the woman:

- Review the antenatal notes and the electronic medical record (EMR) (including all antenatal screening results) and discuss these with the woman. Ask her about the length, strength, and frequency of her contractions.
- Ask her about any pain she is experiencing and discuss her options for pain relief.
- Record her pulse, blood pressure, and temperature, and conduct a urinalysis.
- Record if she has had any vaginal loss.

#### Observations of the unborn baby:

- Ask the woman about the baby's movements in the last 24 hours.
- Palpate the woman's abdomen to determine the fundal height, the baby's lie, presentation, position, engagement of the presenting part, and frequency and duration of contractions.

- Auscultate the foetal heart rate for a minimum of one minute immediately after a contraction. Palpate the woman's pulse to differentiate between the heartbeats of the woman and the baby.
- If there is uncertainty about whether the woman is in established labour, a vaginal examination may be helpful after a period of assessment but is not always necessary. Use your clinical judgement as to whether you believe it will positively affect both the client's experience and the clinical assessment
- If the woman appears to be in established labour, offer a vaginal examination.<sup>42</sup>

# 3.1 Measuring foetal heart rate as part of initial assessment

Offer auscultation of the foetal heart rate at first contact with a woman in suspected or established labour, and at each further assessment:

- Use either a Pinard stethoscope or Doppler ultrasound
- Carry out auscultation immediately after a contraction for at least one minute and record it as a single rate
- Record accelerations and decelerations, if heard

- Palpate the maternal pulse to differentiate between the maternal and foetal heartbeats.<sup>42</sup> It will not be accessible via the CTG on the MLU, and as such, CTG will not be part of the initial assessment unless there is a strong clinical indication – in such cases, the transfer will be advised and discussed with the woman.
- If a woman at low-risk of complications requests cardiotocography as part of the initial assessment:
  - Discuss the risks, benefits, and limitations of cardiotocography with her, and support her in her choice
  - Explain that she will need to be transferred to Obstetric-led care<sup>42</sup>

# 4 Care in the latent phase of labour

The latent first stage of labour – a time period, not necessarily continuous, when:

- · There are painful contractions, and
- There is some cervical change, including cervical effacement and dilatation up to four to six centimetres (4- 6cms)
- The duration of the latent phase is difficult to measure<sup>5,27</sup>

If the initial assessment shows the woman to be in the latent phase, offer individualised support:

- · Offer simple analgesia as required
- Provide information and resources

- · Encourage ongoing resilience and positive self-beliefs
- · Ensure rest, hydration, nutrition, mobilisation, and support
- Reassurance and coping strategies such as deep breathing techniques and exercises

#### 4.1 Ongoing support

Offer choices for ongoing care, consider:

- · Individual clinical circumstances
- Distance and travel time to the facility
- Reiterate the actions of hormones that support physiological birth
- · If not requiring one-to-one care, recommend returning home
- If one-to-one support is needed, recommend hospital admission – be mindful that nulliparous people admitted before active labour are more likely to experience oxytocin augmentation and return/remain at home

#### 4.2 Returning home

If the woman decides to return or remain at home, provide information on the following:

- · Coping strategies
- What the woman can expect in the latent first stage of labour and how to work with any pain she experiences

- · When to return/make contact, including any concerns like
  - Increased frequency, strength, and duration of contractions
  - Increased pain or discomfort requiring additional support or
  - Analgesia
  - Vaginal bleeding
  - Membrane rupture
  - Reduced or concern about foetal movements
- Plan an agreed time for reassessment at each contact
- Provide guidance and support to the woman's birth companion(s)<sup>42,49</sup>

### 4.3 Admission to hospital in the latent phase of labour

While it is recommended that people remain at home in the latent phase of labour to avoid unnecessary interventions, it must be recognised that every person experiences their labour differently, and some mothers will need more intensive support from earlier in labour.<sup>42</sup>

These women can be admitted to the appropriate ward for support in hospital. The midwife will offer her additional midwifery support with birthing aids. The same advice as above needs to be given to the women who are being admitted and information on how to access a midwife from the ward.

As the labour progresses ward staff are to contact the MLU staff first, who will endeavour to attend the ward to complete another assessment or, if space is available to mother, will be asked to attend the MLU.

#### 5 Care in established labour

Established as the first stage of labour - when:

- · There are regular painful contractions, and
- There is progressive cervical dilatation from four to six centimetres (4-6cms)<sup>8,42,47,50</sup>

It is important to note that women express their discomfort/pain differently and may be experiencing strong contractions and expressing it in an untraditional manner. This is particularly pertinent for those choosing hypnobirthing. It is important to listen to the women's description of her experience and include that in your evaluation of the clinical picture.

There is a range for cervical dilatation as every woman is different – NICE recommends from four (4) cm<sup>42</sup> and the World Health Organization reports that five (5) cm signifies the beginning of active labour for most women<sup>50</sup>. There is increasing evidence that some women may not be in active labour before six (6)cm dilatation.<sup>8,47</sup>

The Cochrane Review in 2013 on routine vaginal examinations reports there is no evidence to support or reject the routine use of vaginal examinations; if a woman declines the offer of a vaginal examination and cervical dilatation is unknown, use the maternal account of regular and painful contractions.<sup>46</sup>

#### 5.1 Support in labour

- Provide the woman in established labour with supportive one-to-one care.<sup>42</sup>
- Do not leave a woman in established labour on her own except for short periods or at the woman's request.<sup>42</sup>
- Inform the woman that she may drink during established labour and that isotonic drinks may be more beneficial than water.<sup>42</sup>
- Inform the woman that she may eat a light diet in established labour unless she has received opioids or developed risk factors that make a general anaesthetic more likely.<sup>42</sup>

#### 5.2 Comfort and coping strategies

Recognise and respond to changes in the woman's ability to manage discomfort and pain. Communication, including positive language and encouragement, and a flexible approach support the woman to feel in control.

- Consider the woman's coping ability, mobility, weight, and stage of labour and support her choices
- · Utilise the woman's Birth Plan, if provided

#### 5.3 Non-pharmacological support

Most non-pharmacological methods of support appear to be safe for both the woman and her baby, but efficacy is unclear due to limited high-quality evidence.<sup>43</sup> Discuss available options, including known benefits and risks, and support the woman in her choice.

#### Non-pharmacological coping techniques available on MLU:

- · Heat pack
- · Hydrotherapy
- Acupressure
- Hypnosis/hypnobirthing
- Relaxation
- Massage
- Yoga
- Aromatherapy
- Birthing ball
- · Birth exercises and mobilisation
- Music

#### 5.4 Pharmacological support

Offer information about the risks, benefits, and implications of pharmacological pain management options, including impact (if any) on:

- · Progress of labour
- · Recommended monitoring/observations
- · Transfer of care requirements
- · Effectiveness of pain management
- Incidence of side effects

#### Pharmacological support available on the MLU:

Entonox Gas

If a woman is contemplating regional analgesia or Opioid based medication, talk to her about the risks and benefits and the implications for her labour, including the arrangements and need to transfer care to an Obstetric Unit if she is at home or in a Midwifery Unit.<sup>42</sup>

# 6 Monitoring foetal heart rate during labour

Do not offer cardiotocography to women at low-risk of complications in established labour,<sup>42</sup> routine use of CTG for low-risk women is not recommended.<sup>24</sup>

Offer intelligent auscultation of the foetal heart rate to women at low- risk of complications, established during the first stage of labour:

- · Use a foetal doppler monitor
- Carry out intermittent auscultation immediately after a contraction for at least one minute and after every 15 minutes, and record it as a single rate.
- · Record accelerations and decelerations, if heard.
- Palpate the maternal pulse hourly, or more often if there are any concerns, to differentiate between the maternal and foetal heartbeats.<sup>48</sup>

If there is a rising baseline foetal heart rate or decelerations are suspected on intermittent auscultation, actions should include:

- Initially, carrying out intermittent auscultation more frequently, for example, after three consecutive contractions.
- Thinking about the whole clinical picture, including the woman's position and hydration, the strength and frequency of contractions, and maternal observations.

If a rising baseline or decelerations are confirmed, further actions should include:

- · Summoning help
- Advising continuous cardiotocography and explaining to the woman and her birth companion(s) why it is needed
- Transferring the woman to obstetric-led care, provided that it is safe and appropriate to do so.<sup>42</sup>

#### 6.1 Observations during the established first stage

Do not routinely use verbal assessment using a numerical pain score.<sup>42</sup> Use a pictorial record of labour (partogram) once it is established.<sup>42</sup> Record the following observations during the first stage of labour:

- · Half-hourly documentation of the frequency of contractions
- · Hourly pulse
- Four-hourly temperature and blood pressure
- · Frequency of passing urine
- Offer a vaginal examination four-hourly or if there is concern about progress or in response to the woman's wishes (after abdominal palpation and assessment of vaginal loss).<sup>42</sup>
- Provide women-centered care comprising both clinical and emotional support.
- Encourage and help the woman to move and adopt whatever positions she finds most comfortable throughout labour.<sup>42</sup>
- Promote and support the adoption of upright (kneeling, squatting, or standing) and mobile positions; compared to recumbent, lateral, or supine positions during the first stage of labour, upright positions are associated with a reduction in duration of the first stage.<sup>52</sup> But remember to always respect the woman's wishes and instinctive positioning.

- Encourage the woman to have support from birth companion(s) of her choice.<sup>42</sup>
- Encourage ongoing resilience and positive self-belief<sup>49</sup>
- Encourage rest, hydration and nutrition<sup>49</sup>

If any of the indications for transfer are met, transfer the woman to obstetric-led care. Follow the general principles for the transfer of care; see transfer guideline (FH Transfer Policy MLU-OU).

Give ongoing consideration to the woman's emotional and psychological needs, including her desire for pain relief.<sup>42</sup>

Encourage the woman to communicate her need for analgesia at any point during labour.<sup>42</sup>

#### 6.2 Delay in the first stage

These recommendations aim to prevent iatrogenic adverse maternal and perinatal outcomes by minimising unnecessary medical interventions and improving maternal birth experience.<sup>50</sup>

While assessing delay in the first stage, consider all aspects of progress, like:

- Maternal and foetal condition
- Cervical dilatation and changes in rate
- Descent and rotation of the foetal head
- · Strength, duration, and frequency of contractions
- Parity
- · Previous labour history
- Slowing of progress in the multiparous woman<sup>49</sup>

A minimum cervical dilatation rate of one cm/hour throughout the active first stage of labour is unrealistically fast for some women. Therefore it is not recommended to identify normal labour progression. Evidence shows important variations in the distribution of cervical dilatation patterns among women without risk factors for complications, with many women experiencing progression slower than one cm/ hour for the most part of their labours and yet still achieve vaginal birth with normal birth outcomes.<sup>50</sup>

A slower than one cm/hour cervical dilatation rate alone should not be an indication for obstetric intervention.<sup>50</sup>

Before considering any medical interventions, women with suspected delay in labour progression should be carefully evaluated to exclude developing complications (e.g. cephalo-pelvic disproportion). Their emotional, psychological, and physical needs in labour should be carefully determined whether they are being met<sup>50</sup> and/or considering non-medical interventions.

For confirmed delay in labour; 1<sup>st</sup> and 2<sup>nd</sup> stage, please refer to FH Transfer Policy. For example:

- · Ensure adequate hydration and nutrition
- Provide an optimum birth environment, such as a dark, quiet, calm, private, and safe place to birth
- Free movement and exercises
- Rebozo, Spinning Babies techniques and positions to achieve optimal foetal positioning

- · Nipple stimulation
- · Time alone with a partner or to sleep with minimal interruptions
- · Spontaneous emptying of the bladder

Suppose the clinical picture shows a concern with the maternal or foetal condition that triggers recommendation for transfer (Transfer Policy). In that case, the transfer should be discussed fully and recommended to the mother. It should also be discussed thoroughly with the Obstetric lead. Once fully informed consent is attained, the transfer policy should be followed, and the mother should be transferred to the Obstetric Unit.

#### 6.3 Second stage of labour

The second stage of labour can be defined as:

- · Passive second stage of labour:
  - The finding of full dilatation of the cervix before or without involuntary expulsive contractions.
- · Onset of the active second stage of labour:
  - The baby is visible
  - Expulsive contractions with a finding of full dilatation of the cervix or other signs of full dilatation of the cervix

Active maternal effort following confirmation of full dilatation of the cervix in the absence of expulsive contractions.<sup>42</sup>

There are many signals from the woman when the active or expulsive phase commences:

- · Change in the expression on the face, words, and actions
- Progression of the purple line
- Evidence of show
- Involuntary pushing irregularly at first that progress to regular pushing during a contraction with the natural expulsive reflex
- Woman follows cues from her body, no verbal instruction is necessary
- Midwife offers praise and encouragement only

Physiological pushing instinct is supported during birth and recognises the significance of rotational expulsion urges before full dilatation of the cervix. Recognising that some women instinctively push before their cervix is fully dilated and is not viewed as a complication as there is no evidence to support this. Early pushing instinct has been found to occur more frequently in primiparous women and women with babies in the occipito posterior position. Peed suggests that 'early' pushing in some circumstances may contribute to additional downward pressure, the rotation of the baby into an anterior position, or assist with cervical dilatation.

Directed pushing (Valsalva pushing) has been found to have several detrimental consequences for women, including alterations to circulation<sup>62</sup>, increased perineal trauma, and long-term effects on

bladder function and pelvic floor health.<sup>63,64</sup> Valsalva pushing may reduce oxygen circulating via the placenta to the foetus and does not reflect how women push instinctively.<sup>64</sup>

Inform the woman that in the second stage, she should be guided by her urge to push.<sup>42</sup> Instinctive pushing does not commence at the start of contractions, and women do not take a deep breath before pushing: women alter their pushing behaviours, and use a mix of closed and open glottis pushing. The number of pushes per contraction also varies, with women not pushing at all during some contractions.<sup>61</sup>

#### 6.4 Observations in the second stage of labour

Carry out the following observations in the second stage of labour, record all observations on the partogram, and assess whether the transfer of care is required<sup>42</sup> as part of an ongoing and dynamic risk assessment:

- · Half-hourly documentation of the frequency of contractions<sup>42</sup>
- Hourly blood pressure<sup>42</sup>
- Continued four-hourly temperature<sup>42</sup>
- Frequency of passing urine<sup>42</sup>
- Offer a vaginal examination hourly in the active second stage, or in response to the woman's wishes (after abdominal palpation and assessment of vaginal loss).<sup>42</sup>
- 15-minute maternal pulse observation

#### In addition:

- Continue to take the woman's emotional and psychological needs into account.<sup>42</sup>
- Assess progress, which should include the woman's behaviour, the effectiveness of pushing, and the baby's well-being, considering the baby's position and station at the onset of the second stage. These factors will assist in deciding the timing of further vaginal examination and any need for transfer to obstetric-led care.<sup>42</sup>
- Perform intermittent auscultation of the foetal heart rate immediately after a contraction for at least one minute and every five minutes. Palpate the woman's pulse every 15 minutes to differentiate between the two heartbeats.<sup>42</sup>
- Ongoing consideration should be given to the woman's position, hydration, coping strategies, and pain relief throughout the second stage.<sup>42</sup>

#### 6.5 Delay in the second stage of labour

Walsh states that 'there is no strong evidence to justify arbitrary time limits on the length of the second stage. 66 While the condition of the mother and baby are satisfactory and there is clear progress with the descent of the foetal head, there are no grounds for intervention.' This recommendation of not using arbitrary time limits combined with best practices on encouraging upright position and spontaneous pushing will optimise foetal health.

A specific absolute maximum length of second stage (passive plus active) has not been identified.<sup>68</sup> Rather than rigid time limits, base decision-making on continuing assessment of:

- · Maternal physical and emotional condition
- Foetal condition
- Progress of labour
- Maternal preferences

Offer information about risks and benefits of longer and shorter duration relevant to individual circumstances. Longer durations may be appropriate in individual women<sup>8,51</sup> where:

- · Maternal and foetal condition is optimal
- · Appropriate consultation and referral have occurred

In the passive second stage of labour delay pushing (in the absence of clinical concern) if there is no urge to push.<sup>51</sup>

There is no consensus for a defined duration for the passive second stage. Reassess<sup>24</sup> and consult with an obstetrician if in one to two hours (multiparous or nulliparous and depending on the clinical picture) there is:

- · No urge to push, or
- No evidence of progress

With delay in the active second stage of labour the midwife should be alerted to any signs of delay, with a particular focus on maternal exhaustion. Delay can only be diagnosed when there is no obvious sign of descent of the presenting part or by use of VE's to assess descent, flexion, and rotation of presenting part.

NICE states that birth would be expected within three hours of the active second stage in a nulliparous woman and within two hours in a multiparous woman.<sup>42</sup>

#### Delay is suggested when:

- There is no descent, flexion, or rotation of the presenting part for two hours in a nulliparous woman with regular, strong, instinctive, expulsive surges.
- There is no descent, flexion, or rotation of the presenting part for one hour in a multiparous woman with regular, strong, instinctive, expulsive surges<sup>42.</sup>

Follow the FH Transfer Policy, which indicates Obstetric Review in the OU after two hours of the active second stage for Primiparous mothers and one hour for Multiparous mothers.

If these criteria are met, then this triggers a recommendation for transfer. The transfer should be discussed fully and recommended to the mother. Once fully informed consent is attained, transfer policy should be followed, and the mother should be transferred to the Obstetric Unit.

#### 7 Positions for Birth

Women should be encouraged to adopt whatever position feels most comfortable to them during their labour<sup>42</sup> using a variety of furniture and equipment with the emphasis on upright being the most conducive to physiological birth.

Women should be encouraged to give birth in comfortable positions, usually upright, as this is associated with several benefits.<sup>65</sup>

### 7.1 Perineal care in the second stage of labour

Perineal warm compresses (heat therapy) during the second stage may be associated with:<sup>44</sup>

- Decreased incidence of third- and fourth-degree tears<sup>53</sup>
- · Reduced pain scores
- Increased satisfaction and comfort

There is insufficient evidence to support guidance or flexion of the head to reduce perineal trauma. 44,53 There is insufficient evidence to preferentially recommend either 'hands-on' or 'hands-poised' techniques to avoid perineal trauma – either can be used to facilitate spontaneous birth. 24,53 Therefore either the 'hands-on' (guarding the perineum and flexing the baby's head) or the 'hands poised' (with hands off the perineum and baby's head but in readiness) technique can be used to facilitate spontaneous birth. 42

NICE guidance suggests that women should be advised to be guided by their own instincts as there is no high-level evidence for any benefit of directed pushing during the second stage, including on perineal integrity.<sup>42</sup>

Do not carry out a routine episiotomy during spontaneous vaginal birth 42

Inform any woman with a history of severe perineal trauma that their risk of repeat severe perineal trauma is not increased in a subsequent birth, compared with women having their first baby.<sup>42</sup>

Do not offer episiotomy routinely at vaginal birth after the previous third- or fourth-degree trauma.<sup>42</sup>

# 8 The third stage of labour

The third stage of labour is the time from the birth of the baby to the expulsion of the placenta and membranes. The third stage of labour can be managed in one of three ways:

- Physiological management (also referred to as expectant management)
- Active management is further classified according to the timing of cord clamping:
  - Delayed cord clamping also referred to as modified active management (recommended)

# 8.1 Active management with delayed or optimal cord clamping

Recommended for all births while initiating essential neonatal care:<sup>27,54,55</sup>

- Administer uterotonic immediately after the birth of the baby and before the cord is clamped and cut<sup>56</sup>
- Wait at least one to three minutes after birth of baby<sup>55</sup> or preferably for cord pulsation to cease<sup>54</sup> and then clamp and cut the cord
- Use controlled cord traction (CCT) after signs of separation<sup>42</sup>
- Prolonged when not completed within 30 minutes of the birth of the baby<sup>24</sup>

# 8.2 Physiological third stage of labour (not routinely recommended, but mothers may want to make an informed choice)

Suitable for women who:24,29

- · Have a healthy pregnancy
- $\cdot \hspace{0.1in}$  Have had a normal first and second stage of labour
- · Have no risk factors for excessive bleeding
- Make an informed decision after a discussion of the risks and benefits

· HB > 12g/dl

#### Routinely includes:42

- No uterotonic<sup>24</sup>
- No clamping of the cord until pulsation has ceased or following the birth of the placenta<sup>24</sup>
- Leave cord unclamped (or if cut, leave the maternal end unclamped)<sup>45,57</sup>
- · Placenta births spontaneously by maternal effort<sup>24</sup>
- Healthcare provider<sup>45</sup> unobtrusively waits and observes for signs of separation and remains 'hands-off'

Prolonged when not completed within 60 minutes of the birth of the baby.<sup>24</sup> Recommend intervention with oxytocin if bleeding needs to be controlled.<sup>29</sup>

Offer a change from physiological management to active management if the woman wants to shorten the third stage.<sup>42</sup>

## 8.3 Active (early cord clamping)

Early cord clamping (within 60 seconds of the birth of the baby) is no longer recommended for routine management of the third stage.<sup>24,54,55,58</sup> Even in the case of risk factors or initial 'poor condition,' wait at least 60 seconds to gain accurate APGAR and allow the baby to complete physiological adaptations.

Delayed active management of the third stage using 10 IU Oxytocin IM is recommended on the MLU in view of the population in our care and a lack of easy access to blood products and because it is associated with a lower risk of a postpartum haemorrhage and/or blood transfusion.<sup>42</sup>

If a woman declines active third stage, her choices should be respected<sup>42</sup> with a low threshold for intervention, should complications such as excessive bleeding arise.

With both physiological and delayed third stage of labour, aim to achieve optimal hormonal balance by:<sup>19,29</sup>

- Sustaining skin-to-skin contact and avoiding unnecessary separation of woman and baby
- Encouraging the woman to focus on the physiological process and avoid distractions
- Encouraging support people to remain focused on mother and baby and avoid distracting
- Maintain an optimal birth environment to promote continued hormone release
- Ensure the woman is warm, hydrated and light snacks are available
- · Suckling at the breast for breastfeeding mothers

## 8.4 Delay in the third stage of labour

If separation is delayed, consider:

- · Emptying bladder
- · Encouraging breastfeeding
- Changing maternal position
- Move to the active third stage if attempting physiological escalating to the wider team and triggering transfer policy after discussion with the woman if manual removal of products is recommended

#### 8.5 Skin-to-skin contact

Encourage women to have skin-to-skin contact with their babies as soon as possible after birth.<sup>42</sup>

In order to keep the baby warm and dry, cover him or her with a warm, dry blanket or towel while maintaining skin-to-skin contact with the woman.<sup>42</sup>

Avoid separation of a woman and her baby within the first hour of the birth for routine postnatal procedures, for example: weighing, measuring, and bathing, unless these measures are requested by the woman, or are necessary for the immediate care of the baby.<sup>42</sup>

## 9 Initial Assessment

#### 9.1 Initial assessment of the baby

Encourage initiation of breastfeeding as soon as possible after birth, ideally within one hour.  $^{42}$ 

Midwife to undertake an initial examination to detect any major physical abnormality and identify any problems requiring referral.<sup>42</sup>

Ensure that any examination or treatment of the baby is undertaken with the consent of the parents and either in their presence or, if this is not possible, with their knowledge.<sup>42</sup>

Neonatal team to review the baby and complete the full neonatal examination before transfer to the postnatal ward. This can be completed between one to two hours post-birth, if any concerns are identified.

#### 9.2 Initial assessment of the mother

Carry out the following observations of the woman after birth:

- Record her temperature, pulse, and blood pressure. Transfer the woman (with her baby) to obstetric-led care, if any of the relevant indications listed in the transfer policy are met.
- Observations to be completed every 15 minutes for the first hours (BP; Pulse; RR; Temperature x 1). Every 30 minutes for the next two hours. Then four hours on the Ward. Increase observations if any concerns are identified.<sup>67</sup>
- · Uterine contraction and lochia.
- Examine the placenta and membranes: assess their condition, structure, cord vessels, and completeness. Transfer the woman (with her baby) to obstetric-led care if the placenta is incomplete.
- Early assessment of the woman's emotional and psychological condition in response to labour and birth.
- Successful voiding of the bladder. Assess whether to transfer the woman (with her baby) to obstetric-led care after six hours if her bladder is palpable and unable to pass urine.

#### References:

- Australian College of Midwives. National midwifery guidelines for consultation and referral. 3<sup>rd</sup> Edition, Issue 2. [Internet]. 2015 [cited 2017 March 10]. Available from: https://www.midwives. org.au.
- 2. Australian Health Ministers' Conference. National maternity services plan. [Internet]. 2011 [cited 2017 March 10]. Available from: https://www.health.gov.au.
- American College of Obstetricians and Gynaecologists.
   Committee opinion. Approaches to limit intervention during labour and birth. No. 687. Obstet Gynecol 2017;129:e20-8
- 4. Dias MAB, Domingues RMSM, Schilithz AOC, Nakamura-Pereira M, do Carmo Leal M. Factors associated with cesarean delivery during labour in primiparous women assisted in the Brazilian public health system: data from a national survey. Reproductive Health 2016;13(S3):175-85.
- 5. Spong CY, Berghella V, Wenstrom KD, Mercer BM, Saade GR. Preventing the first cesarean delivery: summary of a joint Eunice Kennedy Shriver National Institute of Child Health and Human Development, Society for Maternal- Fetal Medicine and American College of Obstetricians and Gynecologists Workshop. Obstetrics and Gynecology 2012;120(5):1181.
- 6. Maternity Care Working Party. Making normal birth a reality. Consensus statement from the Maternity Care Working Party. [Internet]. 2007 [cited 2017 February 10].

- 7. Society of Obstetricians and Gynaecologists of Canada (SOGC). Joint policy statement on normal childbirth. J Obstet Gynaecol Can 2008;30(12):1163-5.
- American College of Obstetricians and Gynaecologists, Society for Maternal- Fetal Medicine, Caughey AB, Cahill AG, Guise J-M, Rouse DJ. Safe prevention of the primary cesarean delivery. American Journal of Obstetrics and Gynecology 2014;210(3):179-93.
- 9. International Childbirth Education Association. Physiological birth. ICEA Position paper. [Internet]. 2015 [cited 2017 February 10]. Available from: http://icea.org.
- American College of Nurse-Midwives, Midwives Alliance of North America, National Association of Certified Professional Midwives. Supporting healthy and normal physiologic childbirth: a consensus statement. The Journal of Perinatal Education 2013;22(1):14.
- 11. Downe S, Finlayson K. Interventions in normal labour and birth. Survey report in March 2016. [Internet]. 2016 [cited 2017 May 24]. Available from: https://www.rcm.org.uk.
- 12. World Health Organization. Care in normal birth: a practical guide. [Internet]. 1996 [cited 2017 February 10]. Available from: http://www.who.int.
- 13. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. Standards of maternity care in Australia and New Zealand. [Internet]. 2016 [cited 2017 February 10]. Available from: https://www.ranzcog.edu.au.

- 14. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. Maternal suitability for models of care, and indications for referral within and between models of care. [Internet]. 2015 [cited 2017 February 12]. Available from: https://www.ranzcog.edu.au.
- 15. Nursing and Midwifery Board of Australia. National competency standards for the midwife. [Internet]. 2010 [cited 2017 March 29]. Available from: www. nursingmidwiferyboard. gov.au.
- 16. Kotaska A. Informed consent and refusal in obstetrics: A practical ethical guide. Birth. 2017; 00:1-5.
- 17. Healy S, Humphreys E, Kennedy C. Midwives' and obstetricians' perceptions of risk and its impact on clinical practice and decision-making in labour: An integrative review. Women and Birth 2016;29(2):107-16.
- 18. Stenglin M, Foureur M. Designing out the fear cascade to increase the likelihood of normal birth. Midwifery 2013;29(8):819-25.
- Buckley SJ. Hormonal physiology of childbearing: evidence and implications for women, babies, and maternity care.
   Washington, DC: Childbirth Connection Programs, National Partnership for Women and Families; 2015.
- 20. National Health and Medical Research Council. National guidance on collaborative maternity care. [Internet]. 2010 [cited 2017 March 17]. Available from: https://www.nhmrc.gov.au.

- 21. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. Collaborative maternity care. [Internet]. 2016 [cited 2017 March 27]. Available from: https://www.ranzcog.edu.au.
- Hodnett ED, Gates S, Hofmeyr GJ, Sakala C. Continuous support for women during childbirth. Cochrane Database of Systematic Reviews. [Interent]. 2013 [cited 2017 March 27]; Issue 7. Art No.: CD003766.pub5 DOI:10.1002/14651858.CD003766. pub5.
- 23. Sandall J, Soltani H, Gates S, Shennan A, Devane D. Midwife-led continuity models versus other models of care for childbearing women. Cochrane Database of Systematic Reviews. [Internet]. 2016 [cited 2017 March 27]; Issue 4. Art No.: CD004667.pub5(4) DOI:10.1002/14651858.CD004667.pub5.
- 24. National Institute for Health and Care Excellence (NICE). Intrapartum care for healthy women and babies. Clinical Guideline 190. [Internet]. 2017 [cited 2017 March 10]. Available from: https://www.nice.org.uk.
- 25. The Royal College of Midwives. Position statement: Continuity of midwife-led care. [Internet]. May 2016 [cited 2017 March 10]. Available from: www.rcm.org.uk.
- 26. Homer CSE. Models of maternity care: evidence for midwifery continuity of care. The Medical Journal of Australia 2016;205(8):370-4.

- 27. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. Provision of routine intrapartum care in the absence of pregnancy complications. [Internet]. 2014 [cited 2017 March 18]. Available from: https://www.ranzcog.edu.au.
- 28. Stark MA, Remynse M, Zwelling E. Importance of the birth environment to support physiologic birth. Journal of Obstetric, Gynecologic and Neonatal Nursing 2016;45(2):285-94.
- 29. Hastie C, Fahy KM. Optimising psychophysiology in third stage of labour: Theory applied to practice. Women and Birth 2009;22(3):89-96.
- 30. Hodnett ED, Downe S, Walsh D. Alternative versus conventional institutional settings for birth. Cochrane Database of Systematic Reviews. [Internet]. 2012 [cited 2017 April 27]; Issue 8. Art. No.: CD000012.DOI:10.1002/14651858.CD000012.pub4.
- 31. Divall B, Spiby H, Roberts J, Walsh D. Birth plans: a narrative review of the literature. International Journal of Childbirth 2016;6(3):157-72.
- 32. Burke N, Donnelly JC, Burke G, Breathnach F, McAuliffe F, Morrison J, et al. Do birth plans improve obstetric outcome for first-time mothers: results from the multi-centre Genesis Study. American Journal of Obstetrics and Gynecology 2016;214(1): S276.
- 33. Singata M, Tranmer J, Gyte GML. Restricting oral fluid and food intake during labour. Cochrane Database of Systematic Reviews. [Internet]. 2013 [cited 2017 March 27]; Issue 8. Art No.: CD003930.pub3(8) DOI:10.1002/14651858.CD003930.pub3.

- 34. Australian College of Midwives. BFHI handbook for maternity facilities. [Internet]. 2016 [cited 2017 March 10]. Available from: https://www.midwives.org.au.
- 35. Jenkinson B, Josey N, Kruske S. BirthSpace: An evidence-based guide to birth environment design (Updated February 2014). Queensland Centre for Mothers & Babies, The University of Queensland; 2013.
- 36. Australian College of Midwives. Midwifery philosophy. [Internet] 2017 [updated no date; cited 2017 April 18]; Available from: https://www.midwives.org.au
- 37. Australian Medical Association. Maternal decision-making: position statement. 2013 [cited 2017 July 4<sup>th</sup>]. Available from: https://ama.com.au.
- 38. Queensland Health. Guide to informed decision-making in healthcare (2nd edition). [Internet]. 2017 [cited 2017 July 10]. Available from: https://www.health.gld.gov.au.
- 39. Fahy K. What is woman-centred care and why does it matter? Women and Birth 2012;25(4):149-51.
- 40. Safe Motherhood for All Inc. Women's experiences of birth care in Australia: the birth dignity survey 2017. [Internet]. 2017 [cited 2017 August 15]. Available from: http:// www.safemotherhoodforall.org.au.
- 41. Adams ED. Birth environments: A woman's choice in the 21st century. The Journal of Perinatal & Neonatal Nursing 2016;30(3):224-7.

- 42. 2014. National Institute for Health and Care Excellence (NICE). Intrapartum care for healthy women and babies. Clinical Guideline 190. Available from: https://www.nice.org.uk.
- 43. Jones L, Othman M, Dowswell T, Alfirevic Z, Gates S, Newburn M, et al. Pain management for women in labour: an overview of systematic reviews. Cochrane Database of Systematic Reviews. 2012; Issue 3. Art No,: CD009234.pub2(3) DOI:10.1002/14651858. CD009234.pub2.
- 44. Aasheim V, Nilsen ABV, Lukasse M, Reinar LM. Perineal techniques during the second stage of labour for reducing perineal trauma. Cochrane Database of Systematic Reviews. [Internet]. 2011 [cited 2017 March]; Issue 12. Art No.: CD006672(12):CD006672 DOI:10.1002/14651858.CD006672 pub2.
- 45. Chapman V, Charles C. The midwife's labour and birth handbook. 3<sup>rd</sup> ed. West Sussex: Wiley-Blackwell; 2013.
- 46. Friedman E. An objective approach to the diagnosis and management of abnormal labour. Bulletin of the New York Academy of Medicine 1972;48(6):842.
- 47. Zhang J, Landy HJ, Ware Branch D, Burkman R, Haberman S, Gregory KD, et al. Contemporary patterns of spontaneous labour with normal neonatal outcomes. Obstetrics & Gynecology 2010;116(6):1281-7.
- 48. Sandall, Jane, et al. "Midwife-led continuity models versus other models of care for childbearing women." Cochrane database of systematic reviews 4 (2016).

- 49. Queensland clinical guideline: Normal Birth. 2017 Available online https://www.health.qld.gov.au/data/assets/pdf\_file/0014/142007/g-normalbirth.pdf
- 50. World Health Organisation (WHO): Intrapartum Care for a positive birth experience. 2018 Available online: https://apps. who.int/iris/bitstream/hand le/10665/260178/9789241550215-eng.pdf
- 51. Lee L, Dy J, Azzam H. Management of spontaneous labour at term in healthy women. Journal of Obstetrics and Gynecology Canada 2016;38(9):843-65.
- 52. Lawrence A, Lewis L, Hofmeyr GJ, Styles C. Maternal positions and mobility during first stage labour. Cochrane Database of Systematic Reviews [Internet]. 2013 [cited 2017 April 10]; Issue 10. Art No.: CD003934 DOI:10.1002/14651858.CD003934. pub4.
- 53. Aasheim V, Nilsen A, Reinar L, Lukasse M. Perineal techniques during the second stage of labour for reducing perineal trauma. Cochrane Database of Systematic Reviews 2017, Issue 6. Art. No.: CD006672. DOI: 10.1002/14651858.CD006672. pub3. 2017.
- 54. World Health Organization. Delayed umbilical cord clamping for improved maternal and infant health and nutrition outcomes. [Internet]. 2014 [cited 2017 March 29]. Available from: https://www.who.int.
- 55. World Health Organization. WHO recommendations for the prevention and treatment of postpartum haemorrhage. [Internet]. 2012 [cited 2017 April 10]. Available from: https://www.who.int.

- 56. Pan American Health Organization. Beyond survival: integrated delivery care practices for long-term maternal and infant nutrition, health and development. 2nd ed. [Internet]. Washington, DC: PAHO; 2013 [cited 2017 April 10]. Available from: http://www.who.int.
- 57. Soltani H, Poulose T, Hutchon D. Placental cord drainage after vaginal delivery as part of the management of the third stage of labour. Cochrane Database of Systematic Reviews 2011; Issue 9. Art. No.: CD004665.
- 58. Royal College of Obstetricians and Gynaecologists. Clamping of the umbilical cord and placental transfusion. Scientific Impact Paper No. 14. [Internet]. 2015 [cited 2017 April 17]. Available from: https://www.rcog.org.uk.
- 59. Borrelli SE, Locatelli A and Nespoli A (2013). 'Early pushing urge in labour and midwifery practice: a prospective observational study at an Italian maternity hospital'. Midwife, 29(8): 871-875.
- 60. Downe S, Trent Midwives Research Group, Young C et al (2008). 'The early pushing urge: practice and discourse'. In: Downe S (ed.). Normal childbirth: evidence and debate, 2<sup>nd</sup> edition. London: Churchill Livingstone: Elsevier.
- 61. Reed, R., 2015. Supporting women's instinctive pushing behaviour during birth. The Practising Midwife, 18(6), pp.13-15.
- 62. Tieks FP, Lam AM, Matta BF et al (1995). 'Effects of Valsalva manoeuvre on cerebral circulation in healthy adults: a transcranial doppler study'. Stroke, 26(8): 1386-1392.

- 63. Bosomworth A and Bettany-Saltikov J (2006). 'Just take a deep breath: a review to compare the effects of spontaneous versus directed Valsalva pushing in the second stage of labour on maternal and fetal well-being'. MIDIRS Midwifery Digest, 16(2): 157-165.
- 64. Kopas LM (2014). 'A review of evidence-based practices for management of the second stage of labour'. Journal of Midwifery and Women's Health, 59(3): 264-276.
- 65. Gupta, J.K., Hofmeyr, G.J. and Shehmar, M., 2012. Position in the second stage of labour for women without epidural anaesthesia. Cochrane Database Syst Rev, 5.
- 66. Walsh D (2007) Evidenced-Based Care for Normal Labour and Birth Routledge
- 67. 2018: Government of India (GoI): Guidelines on midwifery Services in India: Available online https://nhm.gov.in/New\_Updates\_2018/NHM\_Componen ts/RMNCHA/MH/Guidelines/MIDWIFERY\_GUIDELINE.pdf

## Pathway: Care in Midwife-Led Unit (MLU)

- 1. Pregnant women from FH may be referred, gain knowledge, or access the MLU in several ways. All low-risk women should be informed of the MLU, the pathway, and evidence for its introduction in the antenatal period. This process will be supported by the FH MLU Family Information Leaflet, which should be given to all suitable women in the antenatal period. MLU birth option will also be promoted through regular workshops and the childbirth education programme to increase knowledge and undertaking of the model of care.
- 2. All low-risk women should be encouraged to meet with the midwifery team, who can further explore these options with them. Regardless of whether they have had access to the midwifery OP during their pregnancy, if they fit the criteria for MLU care, this option should still be promoted to them.
- 3. Using the criteria for MLU admission, women will be assessed throughout pregnancy and their options regarding the birthplace and options discussed by the obstetric and midwifery team. Women will be informed that a risk assessment will be performed on admission in the triage department again on admission, and if continue to fit the MLU criteria, they will be encouraged in this choice. Women can choose to birth in the consultant-led unit if they prefer this option.

- 4. Where they have made a prior request to birth in the MLU (for example, women are already known to the Midwifery team, via the Midwifery OP), the initial assessment in triage should be performed by a midwife where at all possible. The midwife could also risk assess these women in the MLU and transfer them if they do not meet the criteria for birth in the MLU.
- 5. For those who are low-risk at admission but may not have any prior knowledge of the MLU. Ideally, these should have been reviewed and an initial assessment completed by the doctor or midwife if she is available, and her birth options discussed with her and her family. All low-risk women should be informed about the FH MLU at admission, and their suitability and rationale for its introduction discussed. These conversations should be supported by the MLU Information Leaflet.
- 6. For those who are suitable and keen for birth in the MLU, care should be primarily undertaken by the Midwifery team. For example: if the woman is requesting a review in the room, this should be done by the Midwifery team rather than an Obstetric team where possible, taking into consideration the current workload within the hospital.

It is not advised for a midwife to leave a woman in the active phase of labour to review an admission on the ward, and teams need to work collaboratively when the workload is challenging.

- 7. Women can opt to birth in the MLU at any point during their inpatient stay, provided they continue to fit the MLU criteria. The obstetric team should be updated via the handover board of all mothers in the MLU to ensure the safe collaborative practice is maintained.
- 8. The risk assessment will be ongoing throughout the women's inpatient stay and time on the MLU. If at any time she does not fit the Midwife-Led criteria, care will be transferred back to the Obstetric team with discussions with the team and reasons for transfer ensuring complete communication and (SBAR) handover, and the woman fully informed of the reason for this change in care management.

## Intrapartum care on the MLU

- Care will be given in accordance with Midwife-Led Intrapartum Guidelines (separate appendix)
- Transfer Policy (separate policy)
- Postnatal Mother and Baby Care
- Provided there are no concerns, the Midwife will perform all of the routine postnatal and newborn care. Mothers and babies will not routinely be separated for standard tasks such as weighing and checking, as this can be performed within the birthing room. The Midwife will perform the initial check and weight of the baby, with the neonatal team undertaking the advanced newborn after one hour and less than two hours.

## Transfer Arrangements:

- The MLU must have a robust transfer procedure to ensure safety is maintained for all women wishing to birth in the MLU.
   The Lourdes Birth Centre is a Midwife-led service. Therefore, mothers would not be routinely reviewed by the Obstetric team while in the birth centre unless an emergency arises.
- 2. All women will have an in-depth risk assessment prior to admission to the MLU to ensure care is provided in the correct facilities.
- Women and their families should be informed that if complications develop during labour; she requests epidural analgesia, or has concerns and wishes to have an obstetric review they will be transferred to the Obstetric Unit (OU), which is located on the other side of the Labour Ward.

The woman may be transferred by walking, wheelchair, or trolley, depending on the individual circumstances. In cases of acute obstetric emergency where transfer may be needed directly to a theatre, the mother may be reviewed in the room by the on-call obstetric team and then transferred to the Obstetric Theatre if required. Examples: Cord Prolapse, Shoulder Dystocia. (This list is not exhaustive and is taken individually). All other transfer procedures to be completed by the Midwife to the OU and reviewed by the OU team to be completed in the Obstetric unit rather than reviewed in the MLU. All reasons for transfer should be captured via EMR and monthly audits to discuss individual cases and derive learning.

- 4. If the Midwife feels a woman needs to be transferred to the OU, she should first discuss her indications for transfer with the obstetric team, mother, and family. She should then coordinate the transfer by informing the senior midwife on duty. The Midwife should not leave the room and can coordinate the transfer by using the phone in the room.
- 5. Before transfer to the OU, the OBs and the multi-disciplinary team must be informed and ready to meet the mother on arrival.
- 6. A room in the OU must be allocated, and the receiving team informed of the transfer before the transfer.
- 7. All non-emergency transfers would be expected to take no more than 30 mins from the decision to transfer to arrival on the OU. The emergency transfer should be completed in less than 5 mins.

## Non-urgent transfers

- · Maternal and family request
- · Request for epidural analgesia
- · Delay in the first stage of labour

All other transfers are urgent and should be completed within 15 mins from decision time

- 8. Indications for transfer, handover of care, transfer times, and outcomes are audited monthly by the Birth Centre lead and the Labour Ward lead and presented at the monthly review meetings.
- 9. The Midwife caring for the mother is responsible to transfer to the OU and is expected to personally transfer the mother, give clear (SBAR) handover to the receiving team, and continue to care for the mother in the OU where possible. This is known to improve the experience and safety of the mother.

See Transfer Handover Document 1.

#### ADMISSION TO MLU CHECKLIST \_\_\_\_\_\_ Date: \_\_\_\_\_\_ Time: \_\_\_\_\_ Midwiferesponsibleforassessment: \_\_\_\_\_Primary consultant: \_\_\_\_\_ Gravida/Parity: \_\_\_\_\_\_\_Blood Group (If RH –ve Blood) arranged? \_\_\_\_\_ If the Patient meets any of the below criteria she is not eligible for MLU care and should be transferred to the Obstetric Unit. **Maternal Characteristics Current Antenatal Problems** ☐ Maternal age < 17 or > 40 years ☐ Anemia < 9 gm/dL ☐ Height < 145 cm ☐ Urine Albumin > 1+ ☐ Booking BMI < 18 or > 35 ☐ Glycosuria, GDM ☐ Parity 5 or above ☐ Breech or any other presentation Past Obstetric History ☐ Multifetal pregnancy ☐ PPH ☐ HTN in pregnancy (>140/90) ☐ Difficult delivery ☐ Antepartum hemorrhage ☐ Neonatal death or stillbirth ☐ FGR < 10th centile ☐ PROM > 24 hours ☐ History of previous CS ☐ History of eclampsia ☐ Post term pregnancy > 42 weeks ☐ Manual removal of placenta ☐ Preterm labour confirmed **Current Medical Problems** ☐ Temperature > 100F ☐ Hypertension Problem Detected in Labour ☐ Diabetes ☐ Meconium ☐ Renal Disease ☐ FHR < 110, > 160 ☐ Connective tissue disease ☐ Maternal heart rate > 120 ☐ Pulmonary disease ☐ Blood stained liquor ☐ Thyrotoxicosis ☐ Unengaged head > 6 hours of labour ☐ Neurological disease ☐ Poor progress in active labour ☐ Gastrointestinal disease □ Epidural **Past Surgical History** ☐ Intrapartum pyrexia ☐ Induction of labour ☐ Myomectomy ☐ Laparotomy ☐ Pelvic floor repair (OASI) ☐ Uterine repair ☐ Heart surgery Vitals: HR/ Bp/Temp/APVU/RR Criteria achieved for MLU? ☐ Yes ☐ No Transfer Policy and indications explained and agreed? Yes No MLU Information Leaflets shared/explained? Consent Form signed? ☐ Yes ☐ No

Sign:

Time of entry to MLU: Name of Midwife:

#### **MLU AUDIT FORM** \_\_ MR No. \_\_ \_\_\_\_\_ Gestations: \_ Parity: Time Admitted MOM: Name of Midwife providing care on admission Did she attend Midwife OP clinic? ☐ Yes □No If yes, How many appointments? Name/s of Midwife in OP Clinic AN classes attended ☐ Yes □ No Which class was attended? 1 / 2 / 3 / 4 (please circle) Midwife already known prior to labour ☐ Yes ☐ No Stage of labour on admission to MLU Abdominal palpation VE findings on admission to MLU if indicated (VEs are not the only way to assess labour) Time of SROM Length of 1st stage Lenght of 2<sup>nd</sup> stage Mode of birth Position at birth Time of birth Lenght of 3rd stage Active/Physiological Perinael Tears Any perineal massage was done in the AN period? EBL Delayed cord clamping ☐ Yes ☐ No If no, state reason:. If yes, how long? **BABY Baby Apgars** Weight Sex Neonatal resuscitation needed □No Yes Level of resuscitation, if needed Neonatal Admission to NICU Yes □No Skin to skin offered □No Yes If no, state reason Time skin to skin initiated Time skin to skin stopped Reason skin to skin stopped Birth Companions? How many? Time of breastfeeding initiated How long on breast Help offered with breastfeeding Pain relief and mobilisation: Aromatherapy type Massage Hydrotherapy $\Box$ Birthing ball П Rebozo exercises $\Box$ Wall rebozo П Mattress $\Box$ Exercises (squatting, walking, stepping) П Hot shower Spinning babies (specify) $\Box$ П Entonox

Interventions:			
ARM		Epidural	
Foley Catheter		Nelton Catheter	
Episiotomy		Augmentation	
CTG		IV hydration	
Antibiotics		Epidural	
Transfer to OU			
Indication for transfer		Time of transfer planned	
Time of transfer occurred		Reasons for delay, if applicable	
Outcome SVD/AVD	)/EMCS	Baby cord gases	

	TRANSFER FORM MLU-OU
Patient's Name:	
	Primary Consultant:
	Time of Transfer:
ndication for Transfer:	EMERGENCY/Routine:
SITUATION: Antenatal/ Intrapartum/ Postnatal Current Concern:	
BACKGROUND: Parity Gestation Medical History Obstetric History Current Pregnancy Admitted to MLU Time/Details	
ASSESSMENT: Maternal Well-being: Vitals: Bp; Pulse/Temp PU @ Contractions SROM? Time/ Date/ Colour of Liquor AbdoPalpation VETime/Findings	
RECOMMENDATION: Action to be taken on OU Actions to improve safety and stabilise before transfer  Cannula/ IV Fluids Anaesthetic Review CTG Monitoring Obstetric Review	

Why?

Time:

Midwife:

Date:

Signature

Handover Given to. Doctor's Name:

Continued Care: Yes/No

#### TRANSFER CRITERIA

#### Maternal Indications:

- Pulse over 120 beats/minute on 2 occasions 30 minutes apart
- A single reading of either raised diastolic blood pressure of 110 mmHg or more or raised systolic blood pressure of 160 mmHg or more
- Either raised diastolic blood pressure of 90 mmHg or more or raised systolic blood pressure of 140 mmHg or more
  on 2 consecutive readings taken
- 30 minutes apart
- A reading of 2+ of protein on urinalysis and a single reading of either raised diastolic blood pressure (90 mmHg or more) or raised systolic blood pressure (140 mmHg or more)
- Temperature of 100°F (38°C) or above on a single reading, or 99.5°F (37.5°C) or above on 2 consecutive readings 1 hour apart
- Any heavy vaginal blood loss other than a show
- Pain reported by the woman that differs from the pain normally associated with contractions

#### Maternal and family request for Obstetric-led Care

#### **Fetal Indication**

Fetal heart rate below 110 or above 160 beats/minute; or any suspected Fetal Heart Abnormality heard or suspected on Intermittent Auscultation

- Labour Related Transfer Conditions
- Pain reported by the woman that differs from the pain normally associated with contractions
- Delay in Labour: Once in the active phase of Labour (6 cm and contracting well) if < 2 cm progress in 4 hours/ no change in Descent via Abdominal Palpation
- More than 2 hours in the active second stage, birth not imminent. 1 hour for Multiparous
- Inadequate contractions despite midwifery interventions to improve (such as active birth positions; nutrition, aromatherapy; hydrations; nipple stimulation)
- Request by the woman for additional pain relief using regional analgesia
- Meconium stained liquor
- · Third-degree or fourth-degree tear or other complicated perineal trauma that needs suturing
- Retained placenta > 30 mins after Active Management of third stage or 1-hour physiological third stage. Midwifery
  actions to have been undertaken prior to transfer. Transfer to be completed sooner where PPH is evident

Please note this is only guidance; Clinical judgment is paramount. Seek advice and transfer to Obstetric Care if identify any concerns.

## **MLU CONSENT FORM**

l,	MR No		
(MLU) birth in an obst change	een given information about birthing in the Lourdes Midwife-Led Unit in Fernandez Hospital Bogulkunta Unit. I understand that I am eligible to the Centre under Midwife-Led Care. I will also have the opportunity to have tetric review if I change my mind. I will have a doctor review if there are any is in my progress that requires an obstetric intervention. I understand that I transferred to the Obstetric Unit.		
1.	I require further intervention to assist my progress and birth		
2.	I require an epidural analgesia		
3.	My baby needs further close monitoring via the CTG machine		
4.	I need close monitoring as my baby has passed thick meconium		
5.	My Midwife is worried about my well-being		
This is i	not an exhaustive list.		
conten	y state that I have been fully informed and have a full understanding of the ts shared with me and consent to birth in the Lourdes Midwife-Led Unit Midwife-Led Care.		
Name:	Signature		
Date:			
Midwif	Midwife: Signature		
Date:			

## Intrapartum indications for transfer from Midwife-Led Care to Obstetric-Led Care. Maternal Indications:

- · Pulse over 120 beats/minute on 2 occasions 30 minutes apart
- A single reading of either raised the diastolic blood pressure of 110 mmHg or more or raised the systolic blood pressure of 160 mmHg or more
- Either raised the diastolic blood pressure of 90 mmHg or more or raised the systolic blood pressure of 140 mmHg or more on 2 consecutive readings taken 30 minutes apart
- A reading of 2+ of protein on urinalysis and a single reading of either raised diastolic blood pressure (90 mmHg or more) or raised systolic blood pressure (140 mmHg or more)
- Temperature of 100°F (38°C) or above on a single reading, or 99.5°F (37.5°C) or above on 2 consecutive readings 1 hour apart
- · Any heavy vaginal blood loss other than a show
- Pain reported by the woman that differs from the pain normally associated with contractions
- Maternal and family requests for obstetric-led care

## Fetal Indication

- Any abnormal presentation, including cord presentation.
   Transverse or oblique lie
- High (4/5–5/5 palpable) or free-floating head in a nulliparous woman
- Suspected fetal growth restriction or macrosomia. This should be identified prior to entry into the MLU
- Fetal heart rate below 110 or above 160 beats/minute
- Reduced fetal movements in the last 24 hours reported by the woman

#### Labour Related Transfer Conditions

- Pain reported by the woman that differs from the pain normally associated with contractions
- · Confirmed delay in the first or second stage of labour
- Once in the Active Phase of Labour Delay in Labour: Once in the Active Phase of Labour (6 cm and contracting well) if < 2cm progress in 4 hours/ no change in Descent via Abdominal Palpation
- More than 2 hours in the active second stage, birth not imminent. (Maximum 3 hours primp, 2 hours for Multiparous)
- Inadequate contractions despite midwifery interventions to improve (such as active birth positions; nutrition, aromatherapy; hydrations; nipple stimulation)

- Request by the woman for additional pain relief using regional analgesia
- Any Fetal heart abnormality heard or suspected on Intermittent Auscultation
- · Thick meconium-stained liquor
- Third-degree or fourth-degree tear or other complicated perineal trauma that needs suturing
- Retained placenta> 30 mins after Active Management of third stage or 1-hour physiological third stage. Midwifery actions to have been undertaken prior to transfer. Transfer to be completed sooner where PPH is evident

In case of obstetric emergency – Midwife caring for mother to use Emergency Call bell and Multidisciplinary team to review in the room.

This includes antepartum haemorrhage, cord prolapse, postpartum haemorrhage, maternal seizure or collapse, or a need for advanced neonatal resuscitation.





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